ZXTEC®

Electric Apparatus Case of Cutting Machine

User Manual

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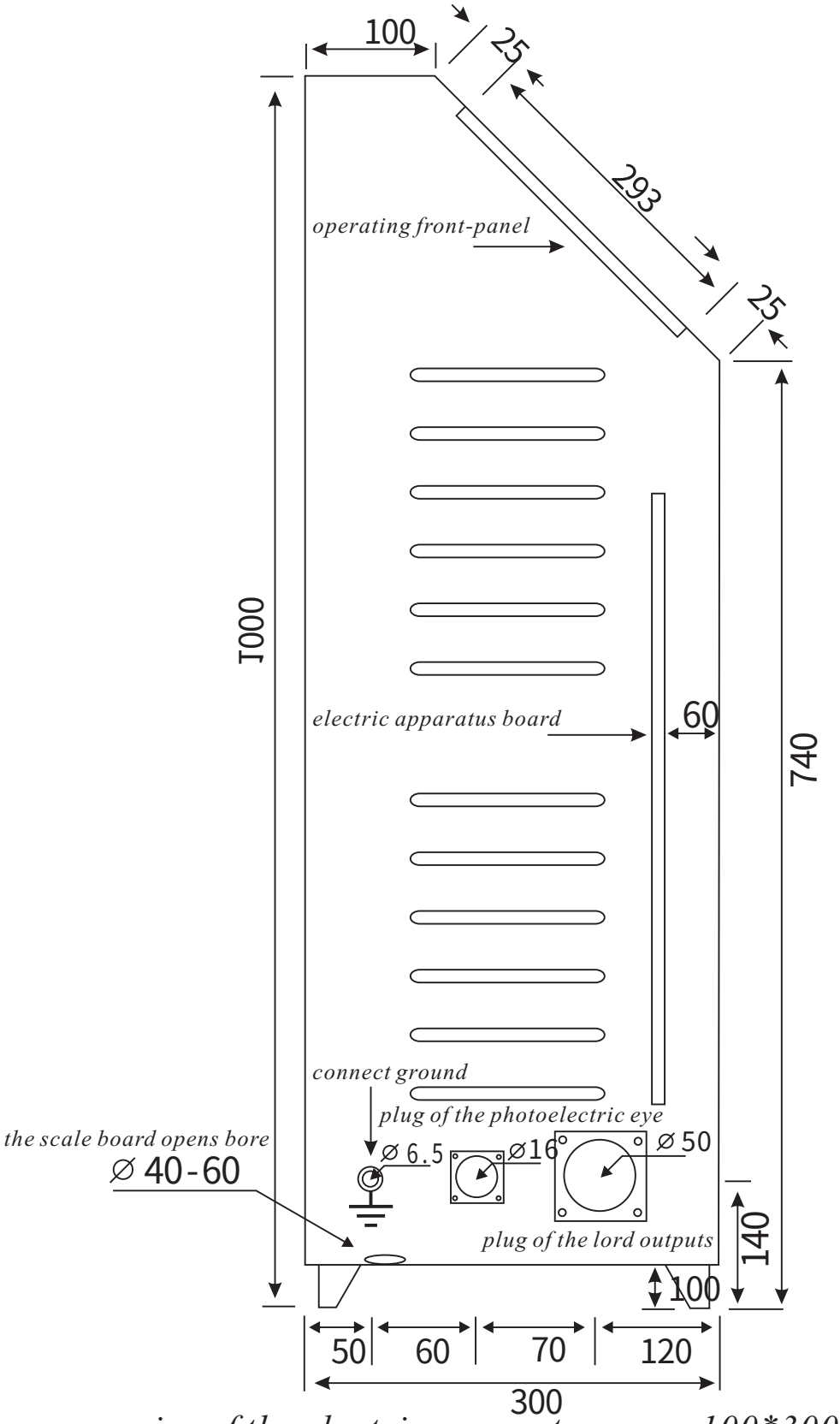
Inform respectfully customer: You must read the manual first and connect with the machine well and connect earth wire of the electric apparatus case.

One. Appearance of the electric apparatus case

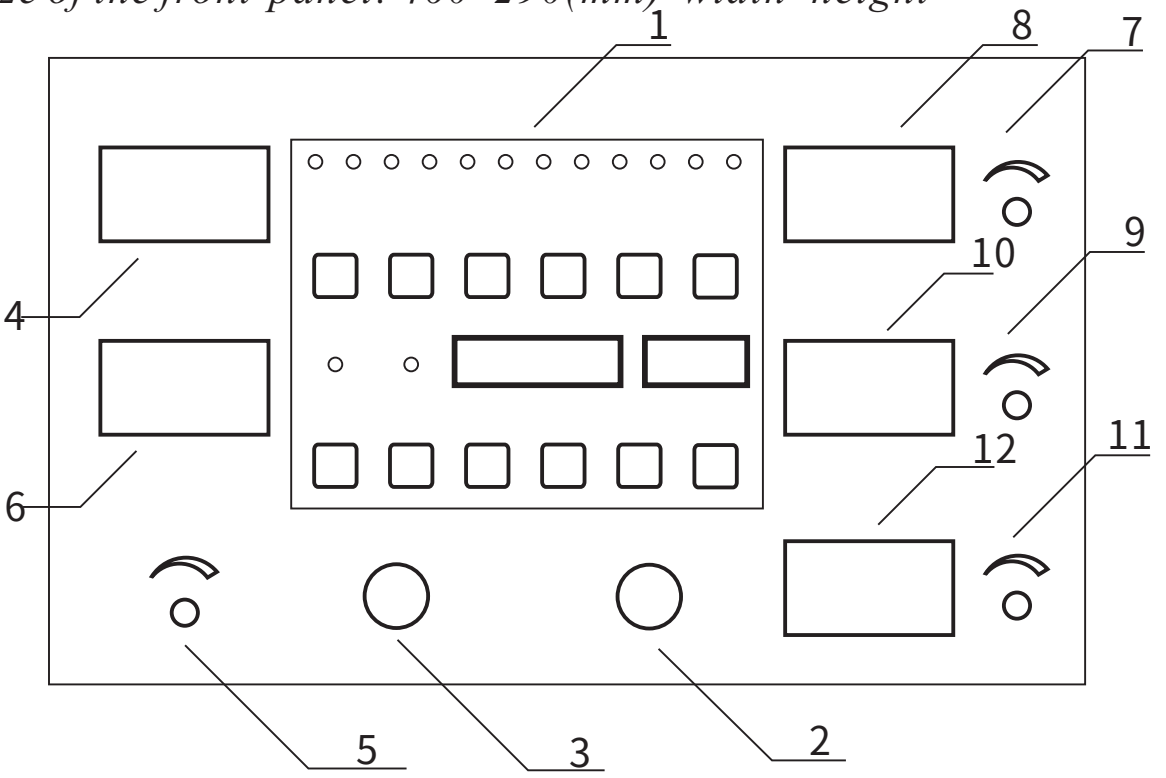


*appearance size of the electric apparatus case: 100*300*510(mm)*
*height*length*width*

*size of the front-panel window: 464*293(mm) width*height*

Two. Sketch map of the front-panel arranges

size of the front-panel: 460*290(mm) width*height



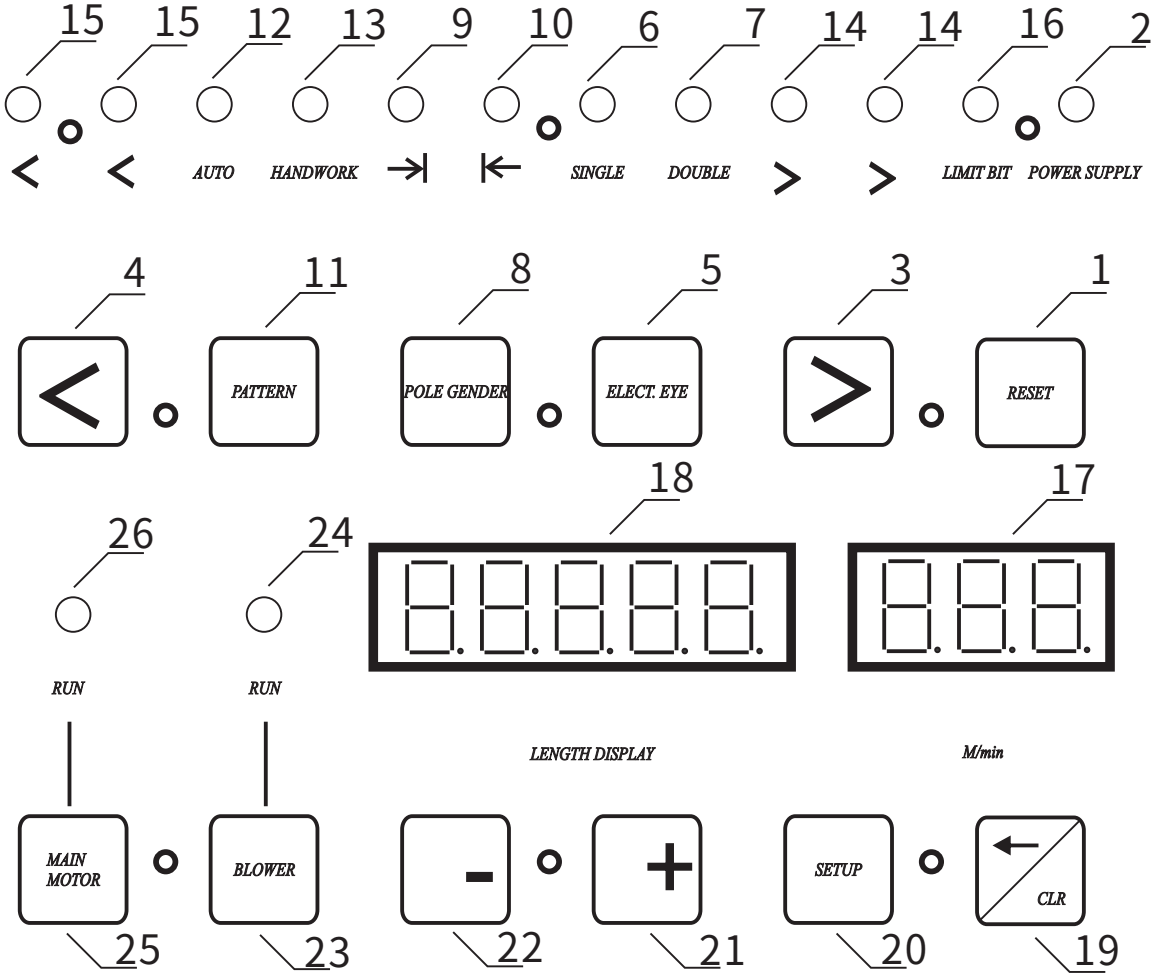
Three. Introduction to every part of the front-panel

1. Computer control system: It consists with automatic photoelectric-correct controller, length controller which can preset control length to automatically stop, line speed instruments, main machine control switch and blower fan control switch (see in detail page elucidation behind).
2. Control switch of the power supply: It is used to open or close the control power supply of control box (notice: this switch closes control power supply only).
3. Power supply indicator: Indicating the power switch is placed in to open or closes appearance.
4. Voltmeter: Indicate electric voltage of the power supply inputs (normal value:180-245 V, please close the power switch when the input voltage is not on the normal value).
5. Potentiometer of main motor: Regulating it can change the speed of the main motor.
6. Tachometer of the main motor: It shows the speed when the main motor revolves.

7.9.11. Tension potentiometer: Adjust each of them can change the tension size of the magnetic-powder clutch or brake (7 is up winding tension, 9 is down winding tension, 11 is unwinding tension potentiometer).

8.10.12. Tension ammeters: They are indicate the value of electric current, 8 is up winding tension, 10 is down winding tension, 12 is unwinding tension.

Four. Explain the control system of the computer

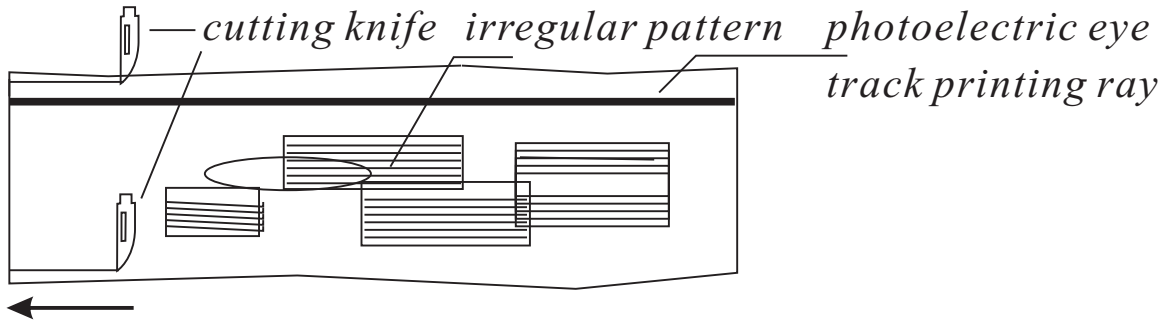


4-1. Part of correction control (control number 1-16):

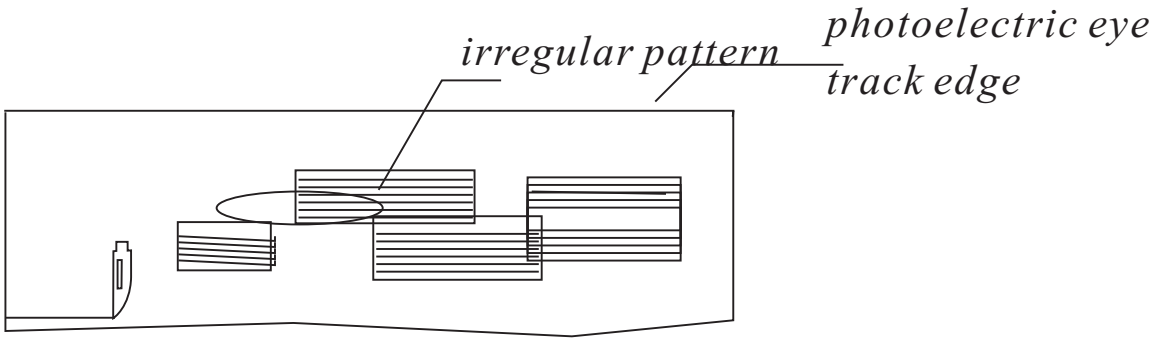
1. Reset: Press it to make the computer initialization.

2. Power supply indicator: When the indicator brights means power supply of the computer parts are placed in power supply appearance.

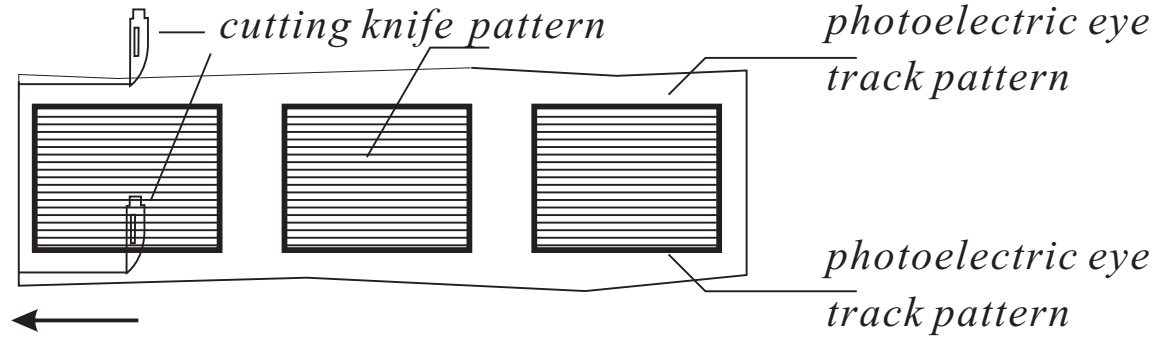
3.4. Direction switch: Press homologous direction switch 3 or 4 will make the correction motor to be turning forward or backward that moving correct pole to adjust following position. In the meantime, according to the indicator 14 or 15 to indicates ambulation direction .



single photoelectric eye track printing ray



single photoelectric eye track edge of materials

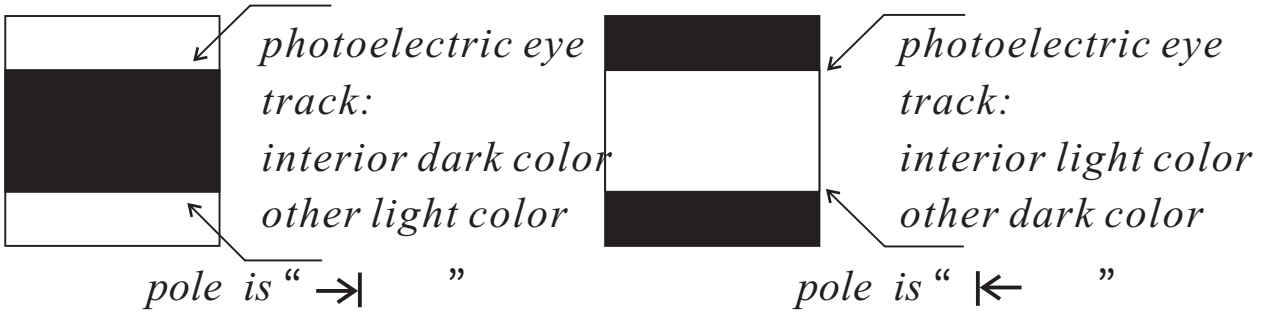


double photoelectric eye track printing pattern

5. Switch of selecting photoelectric eye: Press it can select single or double photoelectric eye to track. It is single photoelectric eye when indicator 6 brights and it is double photoelectric eye when indicator 7 brights. Generally the single photoelectric eye is used to track line and the double photoelectric eye is used to track side (please reference the sketch map overleaf).

6.7. Indicator: Indicator 6 brights means choosing single photoelectric eye to work and indicator 7 brights means choosing double photoelectric eye to work. Single or double photoelectric eye is selected by the switch 5.

8. Switch of choosing pole: Press"pole" switch can choose black or white to work, when indicator 9 brights is on black work, indicator 10 brights is on



white work. Choose black or white work is decided by color of printing material or the photoelectric eye on the trail of position (saw page diagram).

9.10. Indicator: Indicator 9 brights means choosing pole "→|", indicator 10 brights means choosing pole "|←". Pole "→|" or "|←" is selected by the switch 8.

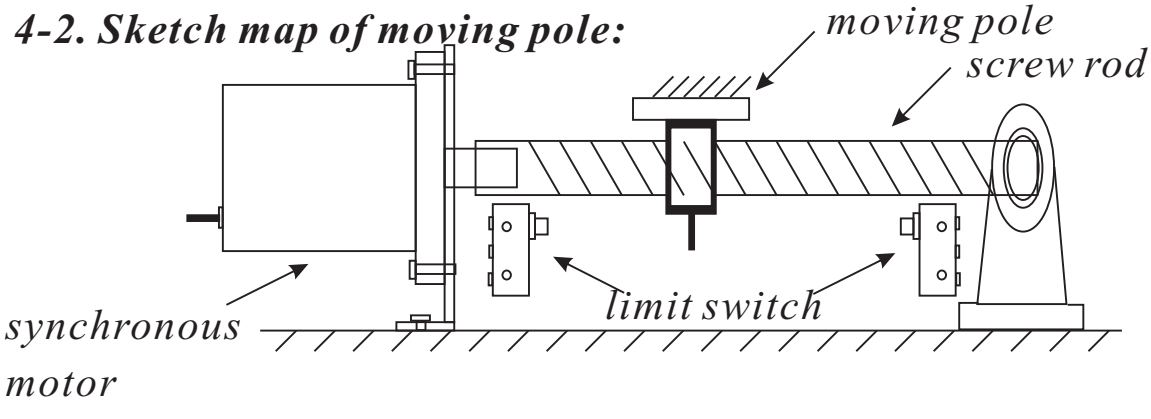
11. Switch of selecting pattern: Press it can select automatic or manual. When indicator 12 brights means the appearance of automatic and indicator 13 brights means the appearance of manual. Generally to operate the correct controller, please select the appearance of manual first according to the color and the type of the correction material to select pole and single or double photoelectric eye. Press the direction switch to adjust photoelectric eye to match precision the side or line of the track material and adjust the sensitivity of photoelectric eye, then press it to select automatic correction.

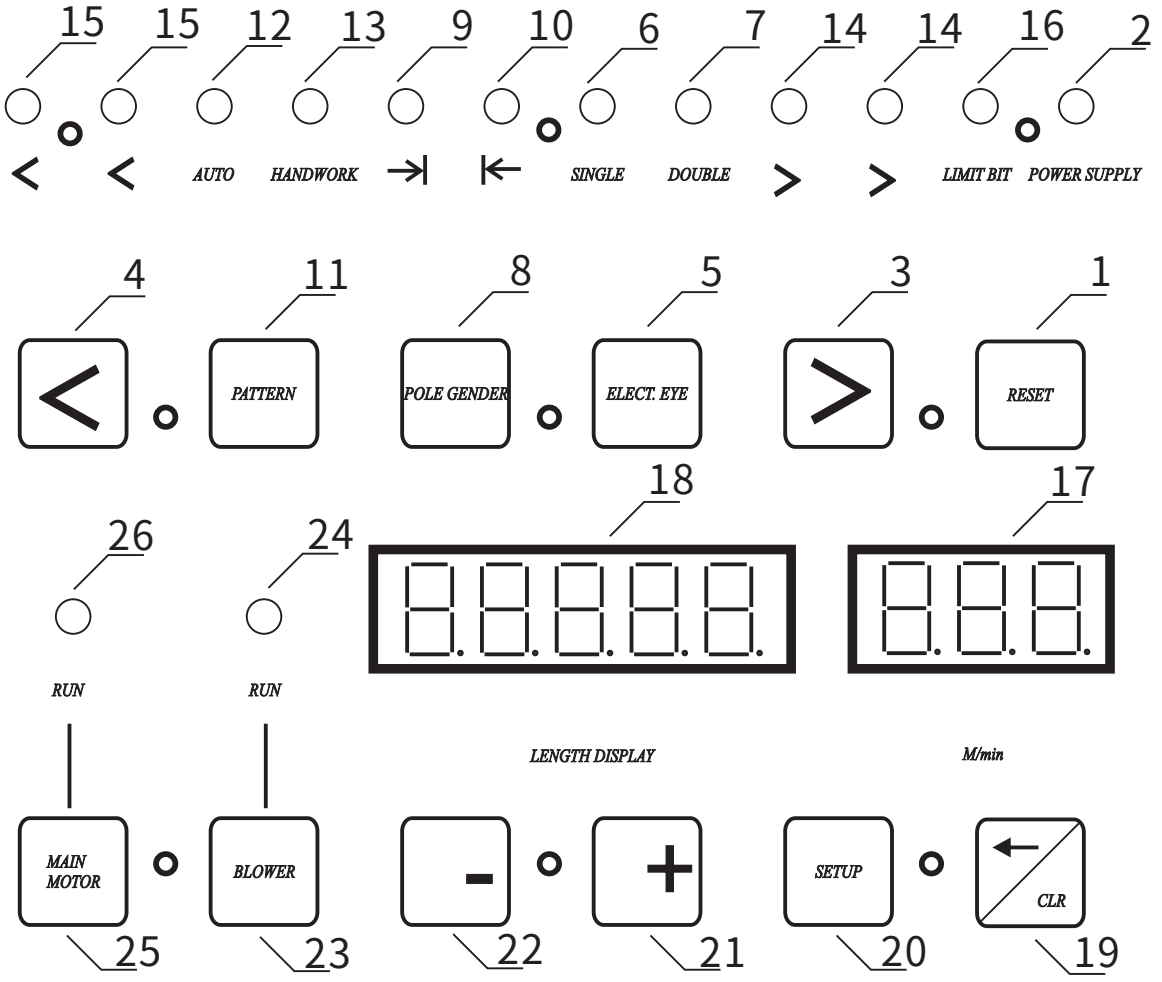
12.13. Indicator: Indicator 12 brights means choosing automatic and indicator 13 brights means choosing manual. Choose automatic or manual to work is determined by the switch 11.

14.15. Indicator: They are represented the running direction of the correction motor namely turning forward or backward.

16. Indicator: It is a limit indicator, it brights means the correct motor run to the limit of the two ports of the limit switch when the computer will shut the power supply of the correct motor and at meantime buzzer sends sound.

4-2. Sketch map of moving pole:





4-3. Part of length and pace measurement (number 17-22):

17. Window of pace shows: If main motor 25 is on, it shows cutting pace of the cutting machine (unit: M/min); If main motor 25 is off, it shows "-P-" which means the machine is stop; When it shows "-L-" means the computer is setting length.

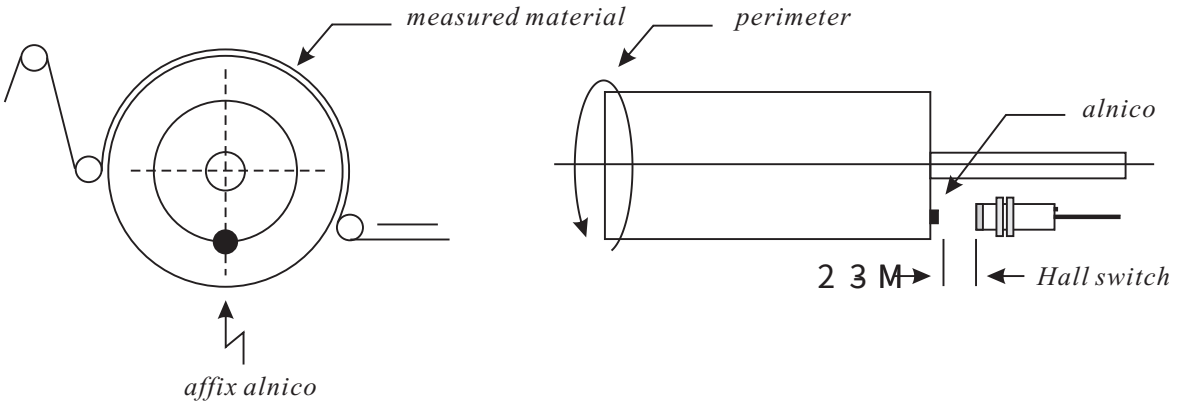
18. Window of length shows: It shows the cutting length (unit: M).

19. Zero clearing/ shift switch: Press it on the state of setting can move set position to change the data quickly. Normally to press it can clear the data of length.

20. Set up switch: Used to set the control length and the perimeter of roll.

21.22. Add and subtract switch: Used to adjust the setting data.

4-4. Method of length and pace measurement:



Length measure adopts Hall switch to pick up every pulse and get the length according to the preset perimeter cumulation method. Speed measure adopts frequence of Hall switch multiply the preset perimeter to compute the speed (see above sketch map).

4-5. Method of setting length and girth controlled

1. Set perimeter: Press the switch "set" tightly until the window of speed to display "-C-", then loose. Now the window of length to display the storage perimeter data last time (unit: M) and scintillation to prompt change position, press "+" or "-" to adjust data and press "CLR/move" switch to move change position to arrive the data of perimeter needed and then perimeter set when the window of length to display "00000".

2. Set the control length: Press the switch "set" a time, the window of speed to display "-L-" and the window of length to display the storage control length last time (unit: M) and scintillation to prompt change position. Press "+" or "-" to adjust data and "CLR/move" switch to move change position to arrive the data of control length needed and then press "set" switch, window of length to display "save", it is finished the length set when the window of length to display "00000".

Notice: Set the needed control length, the machine run to subtract speed automatically before 3 miles of the control length (speed is adjusted by the base potentiometer of the electronic board) and stop the machine when it run to the preset length.

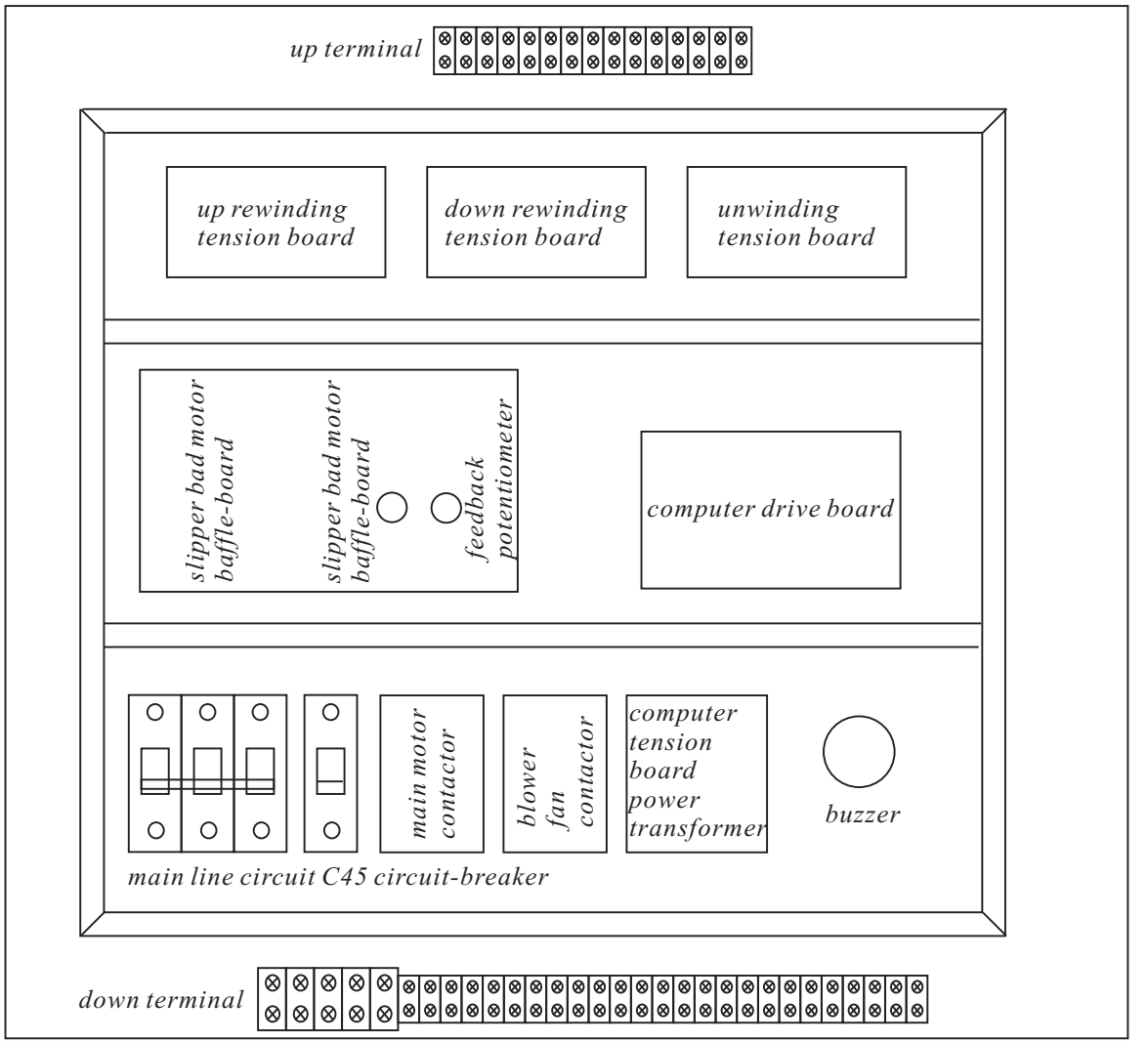
It will not stop machine automatically when the control length is set 0.

4-6. Blower fan and main electric motor control

23. Blower fan switch: Press it can start or shut off the blower fan.
24. Indicator: It indicates the state of the blower fan work. It is on when the blower fan run and it is off when the blower fan is shut off.
25. Main motor switch: Press it can start or shut off the main motor. It will shut off then main motor automatically below two conditions:
    1. Correct motor runs to the limit, ie touch the limit switch.
    2. The measured length arrives the preset control length.
26. Indicator: It indicates the state of main motor work. It is on when the main motor run and it is off when the main motor is shut off.

Five. Sketch map of the electric apparatus board arranges

size of glue wooden board:580*490 (mm) height*width

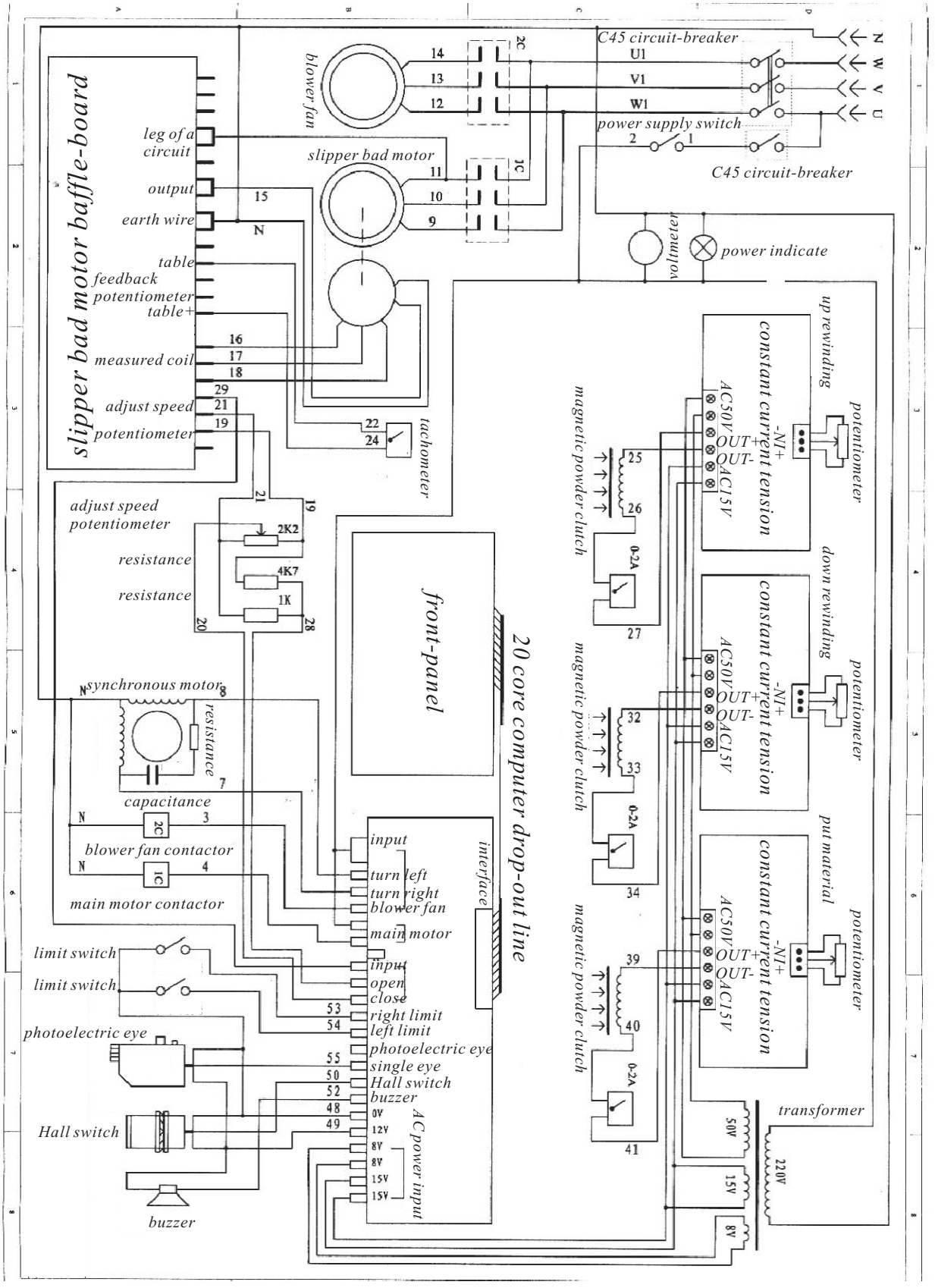


Six. Plug number of the main aviation

plug number	wiring number	instruction
1.	N	synchronous motor total(earth wire)
2.	7	synchronous motor turn forward (right)
3.	8	synchronous motor turn opposite(left)
4.	9	main motor
5.	10	main motor
6.	11	main motor
7.	12	blower fan
8.	13	blower fan
9.	14	blower fan
10.	15	excitation of main motor
11.	N	excitation of main motor(earth wire)
12.	16	coil of main motor measure speed
13.	17	coil of main motor measure speed
14.	18	coil of main motor measure speed
15.	25	magnetic powder clutch of up winding-
16.	26	magnetic powder clutch of up winding+
17.	32	magnetic powder clutch of down winding-
18.	33	magnetic powder clutch of down winding+
19.	39	magnetic powder brake of unwinding-
20.	40	magnetic powder brake of unwinding+
21.	48	0V electric power supply
22.	49	12V electric power supply
23.	50	input the signal of Hall switch
24.	53	right limit switch of correction
25.	54	left limit switch of correction
26.	48	0V electric power supply

Seven. Plug number of the photoelectric eye

plug number	wiring number	instruction
1.	49	12V electric power supply
2.	55	input single of photoelectric eye
3.	48	0V electric power supply


slipper bad motor baffle-board
leg of a circuit
output
earth wire
table feedback potentiometer table+
measured coil
adjust speed potentiometer
blower fan
slipper bad motor
C45 circuit-breaker
power supply switch
voltmeter
power indicate
tachometer
adjust speed potentiometer
resistance
resistance
front-panel
20 core computer drop-out line
synchronous motor
capacitance
blower fan contactor
main motor contactor
interface
input
turn left
turn right
blower fan
main motor
limit switch
limit switch
photoelectric eye
Hall switch
buzzer
AC power input
constant current tension
AC50V OUT+ OUT- AC15V
-NI+
potentiometer
up rewinding
down rewinding
put material
magnetic powder clutch
0-2A
transformer
50W
15V
8V
220V